Work Order ID 91918

91918

October-19-12 2:31:38 PM

Item ID: D3187-2 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Spacepod Floor

Start Date: 10/18/12 **Start Qty:** 2.00 *2*

Required Date: 11/09/12 **Req'd Qty:** 2.00 *2*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** MLJ **Date:** 12-10-22 **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D3187	Rev C								
100		0.00							
100	FLOW WATER JET					2	0		JM 12-10-29
Waterjet	**Memo**	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg D3187 Dwg Rev: C Prog Rev: C 2- Deburr if necessary								
6061 .050									
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110						2	0		JM 12-10-29
QC	**Memo**	0.00							
Quality Control	***TEMPLATE DT3187-1T1***								
120	QC8- Inspect parts - second check	0.00							
120						2			
QC	**Memo**	0.00							
Quality Control									

DAS 15 12.10.29

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric to O/S
- ☐ Cracks
- ☐ Crushed/Crimped
- ☐ Cuffs
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Ripples in Bend
- ☐ Torque Waves in Extrusion
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damaged
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drill Holes
- ☐ Drawing
- ☐ Finish
- ☐ Folio
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
- ☐ Mislabeled
- ☐ Misread
- ☐ Offset
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Ovalized
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____

_____

_____

Item ID: D3187-2 **Accept** *N900040100* **Setup Start** *NS1*
Revision ID: **Stop** *NS2*
Item Name: Spacepod Floor

Start Date: 10/18/12 **Start Qty:** 2.00 *2* **Cust Item ID:**
Required Date: 11/09/12 **Req'd Qty:** 2.00 *2* **Customer:**
Reference:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Chemical Conversion Coat per QSI005 4.1	0.00				2	RK	12-10-30	
130 HandFinish Hand Finishing	**Memo**	0.00							
140	Black Sandtex(Ref:4.3.5.7) per QSI005 4.3	0.00				2 X ϕ		12/10/30	ML
140 Powdercoat Powder Coating	**Memo** START TIME: 8:00 _____OVEN TEMPERATURE: 320°F _____FINISH TIME: 8:30	0.00							
150	QC3- Inspect Part Finish	0.00				2 ϕ		12-10-30	
150 QC Quality Control	**Memo**	0.00							

M121279

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

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- ☐ Finish
- ☐ Folio
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- ☐ Hardware
- ☐ Inspection Incomplete
- ☐ Instructions Incomplete/Unclear
- ☐ Maintenance
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- ☐ Part Moved
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- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

Work Order ID 91918 *91918*

October-19-12 2:31:38 PM

Item ID: D3187-2 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Spacepod Floor

Start Date: 10/18/12 **Start Qty:** 2.00 *2* **Cust Item ID:**

Required Date: 11/09/12 **Req'd Qty:** 2.00 *2* **Customer:**

Reference:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* Small Fab Small Fab	Small Fab	0.00							
	Memo 1- install D2986-1 rubber spacer using contact cement and trim to fit if necessary as per dwg D3187A/R contact cement Batch: 112983 2- transfer holes from spacepod floor to rubber spacer	0.00	13-02-05			2			
170 *170* QC Quality Control	QC5- Inspect part completeness to step on W/O	0.00	DAS 16 9-03	13/2/5		(x2)			
	Memo	0.00							
180 *180* Packaging Packaging	Identify as per dwg & Stock Location: CA	0.00							
	Memo	0.00							

MT 13-2-05

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
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- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
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- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

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Landing Gear

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- ☐ Folio
- ☐ Grain
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- ☐ Instructions Incomplete/Unclear
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- ☐ Mislabeled
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Item ID: D3187-2 **Accept** *N900040100* **Setup Start** *NS1*
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Start Date: 10/18/12 **Start Qty:** 2.00 *2* **Cust Item ID:**
Required Date: 11/09/12 **Req'd Qty:** 2.00 *2* **Customer:**
Reference:

Run Start *NR1*
Stop *NR2*

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00					13/2/6		
190									
QC	**Memo**	0.00							
Quality Control									

MF
13-2-05

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
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- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										

FAULT CATEGORY

Landing Gear

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- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other _____

Picklist Print

October-19-12 2:31:38 PM

Work Order ID: 91918

Parent Item: D3187-2 **Start Date:** 10/18/12 **Required Date:** 11/09/12

Parent Item Name: Spacepod Floor **Start Qty:** 2.00 **Required Qty:** 2.00

Comments: IPP: C05.04.14Now a purchased partKJ/JLM
IPP Rev:D Now on Waterjet 07-04-19 JLM
IPP Rev:E Now Powder Coated 07-05-24 JLM
IPP Rev:F 09-01-20 rev.C as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2986-1 Rubber Spacer		Manufactured	No			110	Each	2.0000	1	2			
				Location		**Loc Qty**		**Loc Code**					
				ST141a		2							
					60770	2							
M6061T6S.050 6061-T6 .050 Sheet		Purchased	No			160	sf	402.5160	7.43	~~15.642105~~ 16.0			
				Location		**Loc Qty**		**Loc Code**					
				MAT021		402.516							
					114799	28.341							
					114993	15							
					121192	71.175							
					123293	288							

96786 ~~B~~ B-0206

~~16.0~~ JM 12-10-2

+123293

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Work Order Update ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	☐									
Equip/Tooling	☐									
Operator	☐									
Material	☐									
Setup	☐									
Other	☐									
Process	☐									
Supplier	☐									
Training	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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- ☐ Power Loss/Surge
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- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____

_____

_____

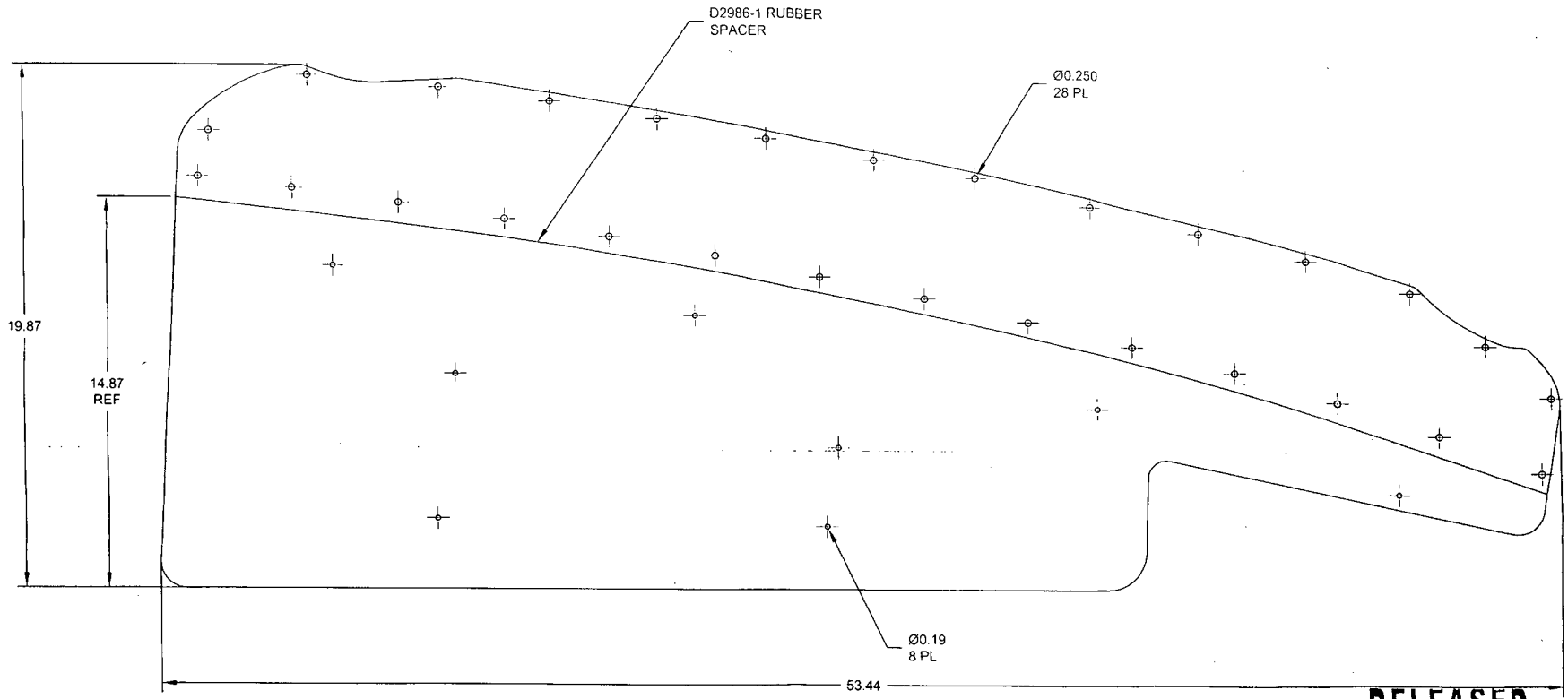
DART AEROSPACE LTD	Work Order:	91918
Description: Spacepod Floor	Part Number:	D3187-2
Inspection Dwg: D3187 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.250	+0.005/-0.001	0.251"	-		V	MMO1
Ø0.19	+0.005/-0.001	0.192"	-		V	
19.87	+/-0.030	19.87"	-		T	RWDW303
53.44	+/-0.030	53.44"	-		T	

Measured by:	JM	Audited by:	DAS 15 9-89	Preliminary Approval:	N/A
Date:	12-10-29	Date:	12 10-29	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.06.04	New Issue	KJ/JLM	
B	10.08.03	Dimensions updated to Dwg Rev C	KJ	



D3187-1 SPACEPOD FLOOR

RELEASED 09.01.05 MB

D3187-1 SPACEPOD FLOOR NOTES: (C)

1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.050 THICK
   PER QQ-A-250/11 OR AMS 4025 OR AMS 4027
   (REF DART SPEC. M6061T6S.050)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
   POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3187-1" USING WHITE FINE POINT PERMANENT INK MARKER
7) WEIGHT: 4.2 LBS
8) TOOLING: CUT/DRILL PER TEMPLATE DT3187-1T1
9) AFTER FINISH, INSTALL D2986-1 RUBBER SPACER USING CONTACT CEMENT. TRIM TO FIT

SHOP
REF
ENGR
UNCONTR
SUBJECT
WITH
WORK
NO. 919.18 MLJ 12-1022

REV.	DESCRIPTION	BY	DATE
C	REDRAWN TO CURRENT STANDARDS; TRANSFERRED TO B-SIZE FORMAT; ADDED SHEET 2; CREATED DETAIL FOR D3187-2; REVISED SHEET 1 NOTES. REASON: CLARIFIED DRAWINGS FOR D3187-1/-2.	MB	09.01.05
B	CHANGE SHAPE	CP	03.05.16
A	NEW ISSUE	CP	03.03.31

DESIGN	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN		
CHECKED	DRAWING NO.	REV. C
MFG. APPR.	D3187	SHEET 1 OF 2
APPROVED	TITLE	SCALE
DE APPR.	SPACEPOD FLOOR	NTS
DATE 09.01.05		

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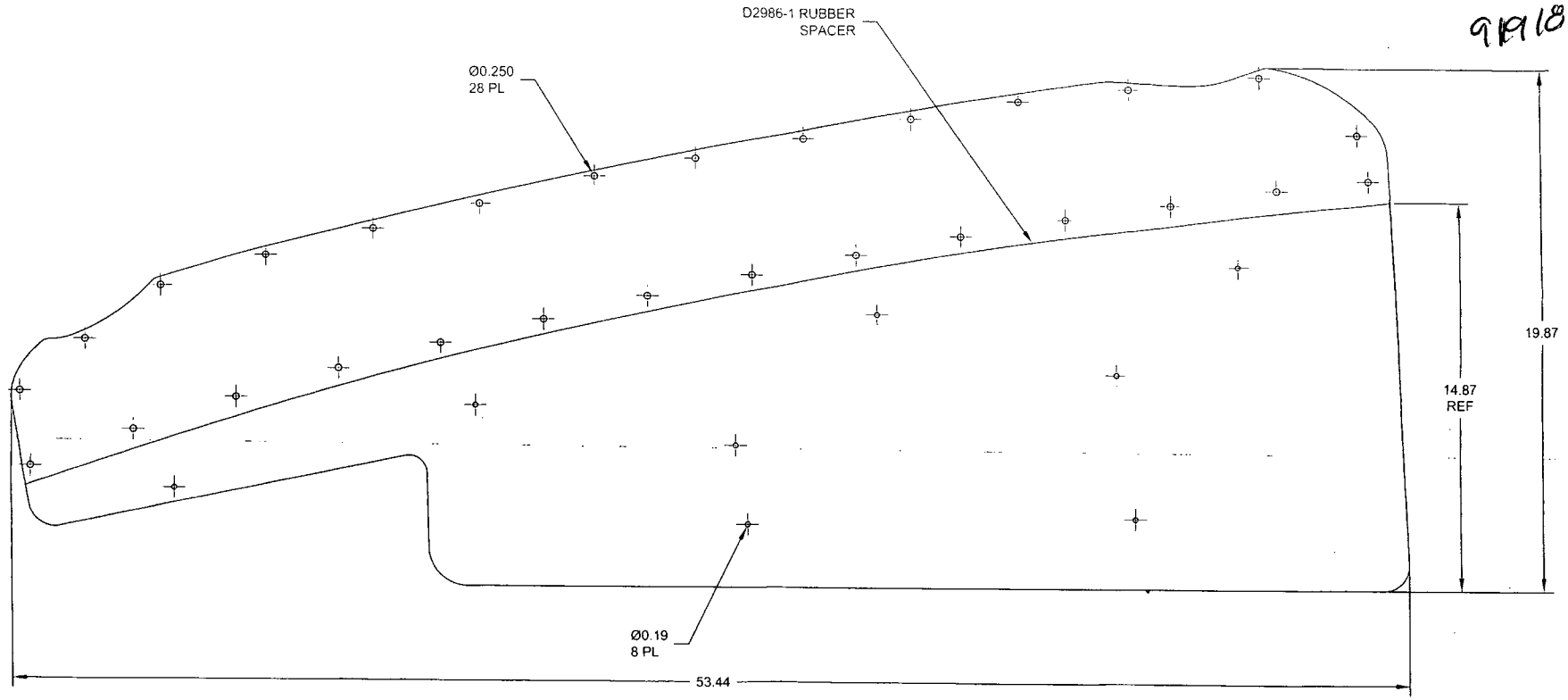

9918

D3187-2 SPACEPOD FLOOR

RELEASED 09.01.05

D3187-2 SPACEPOD FLOOR NOTES:

1) MATERIAL: 6061-T6 (OR 6061-T62) ALUMINUM SHEET, 0.050 THICK
   PER QQ-A-250/11.OR AMS 4025 OR AMS 4027
   (REF DART SPEC. M6061T6S.050)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
   POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3187-2" USING WHITE FINE POINT PERMANENT INK MARKER
7) WEIGHT: 4.2 LBS
8) TOOLING: CUT/DRILL PER TEMPLATE DT3187-1T1
9) AFTER FINISH, INSTALL D2986-1 RUBBER SPACER USING CONTACT CEMENT. TRIM TO FIT

DESIGN		**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN		
CHECKED		DRAWING NO. D3187 — REV. C — SHEET 2 OF 2
MFG. APPR.		
APPROVED		TITLE: SPACEPOD FLOOR — SCALE: NTS
DE APPR.		
DATE 09.01.05		

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